

Mezzanine Inspection Report

Date: 01/14/15	Station Name: K06 - West Falls Church	Mezzanine #: 101	Completed By: Mike Butler
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Summary

Pull string installation was completed for communication duct in faregate array, however video scoping could not be completed due to an obstruction at 15' from Kiosk. Video scoping could not be completed for power duct in faregate array because the duct is at capacity. Video scoping and pull string installation could not be completed in power duct between Kiosk, Handhole and AFC Panel because the duct is at capacity.

Scanning was conducted to establish a proposed power route between the Kiosk and AFC Panel. The scanning results showed that the mezzanine floor is congested with ducts and there is no clear path for a proposed in-floor duct from the Kiosk to the AFC Panel. An overhead conduit is proposed from the Kiosk to AFC Panel, which will run up vertically from the Kiosk and run across the mezzanine ceiling until it reaches the outer wall between the mezzanine and Room 210. The wall will be core drilled to allow the conduit to pass through. The conduit will run across the ceiling plenum of Room 210 and pass through the next wall between Room 210 and Room 212 (by core drilling). Once inside Room 212, the conduit will snake around the internal wall until it reaches the AFC Panel.

Refer to attached photos and drawings for further information.

Scoping of Faregate Array(s)

Task	Yes/No	Notes
Communications Duct –Faregate Array (9 gates)		
Was video scoping completed for the entire duct run?	No	
Were pull strings installed at all faregates in the array?	Yes	Pull string installed in 6" duct.
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	There was an obstruction at 15' from Kiosk, which appeared to be congested wires (6" duct) and heavy concrete debris (4" duct).
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	4" and 6" ducts with less than 15 wires.
Power Duct - Faregate Array (9 gates)		
Was video scoping completed for the entire duct run?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Duct obstructed at 2' from Kiosk.
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	Yes	4" power duct at 80% capacity (more than 20 wires).


Scoping of Power Duct - Kiosk to AFC Panel		
Task	Yes/No	Notes
Kiosk to Handhole (Distance: 42')		
Was video scoping completed for the entire duct / conduit run?	No	
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Wire congestion caused an obstruction.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	Yes	6" duct is at 80% capacity (more than 20 wires).
Handhole to AFC Panel (Distance: 18')		
Was video scoping completed for the entire duct / conduit run?	No	
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Wire congestion caused an obstruction.
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	Yes	6" duct is at 80% capacity (more than 20 wires).
Observations / Issues / Next Steps		
Total distance of proposed overhead conduit from Kiosk to AFC Panel is 88'.		
Sign Off		
	GFP Representative	WMATA PRGM
Name:	Mike Butler	
Signature:		
Date:	03/23/15	

Photo 1 – Existing duct on mezzanine floor



Photo 2 – Existing duct on mezzanine floor

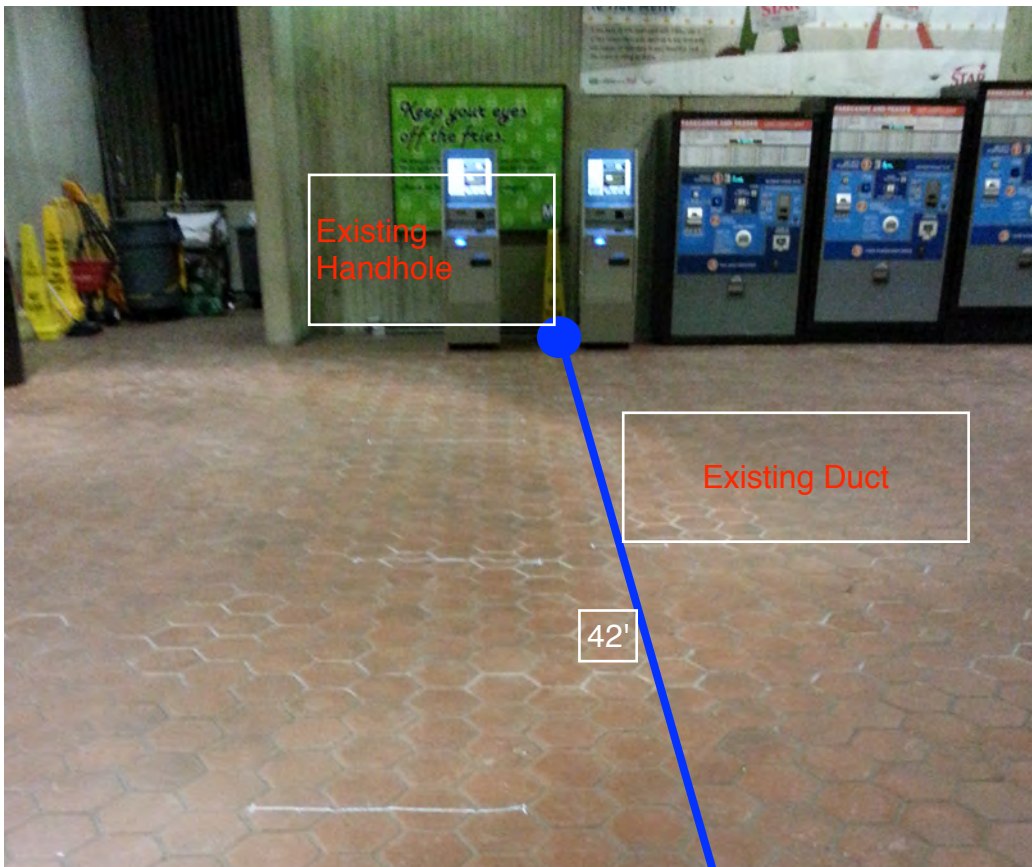


Photo 3 – Proposed overhead conduit

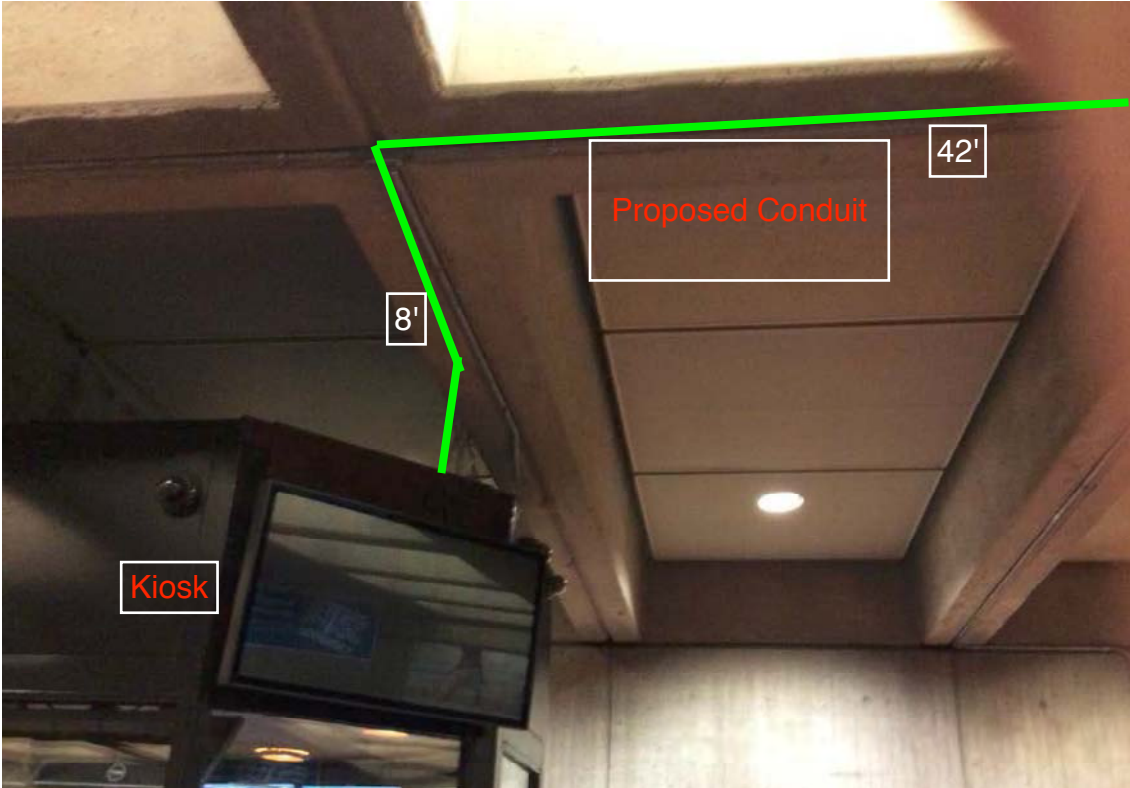


Photo 4 – Proposed overhead conduit

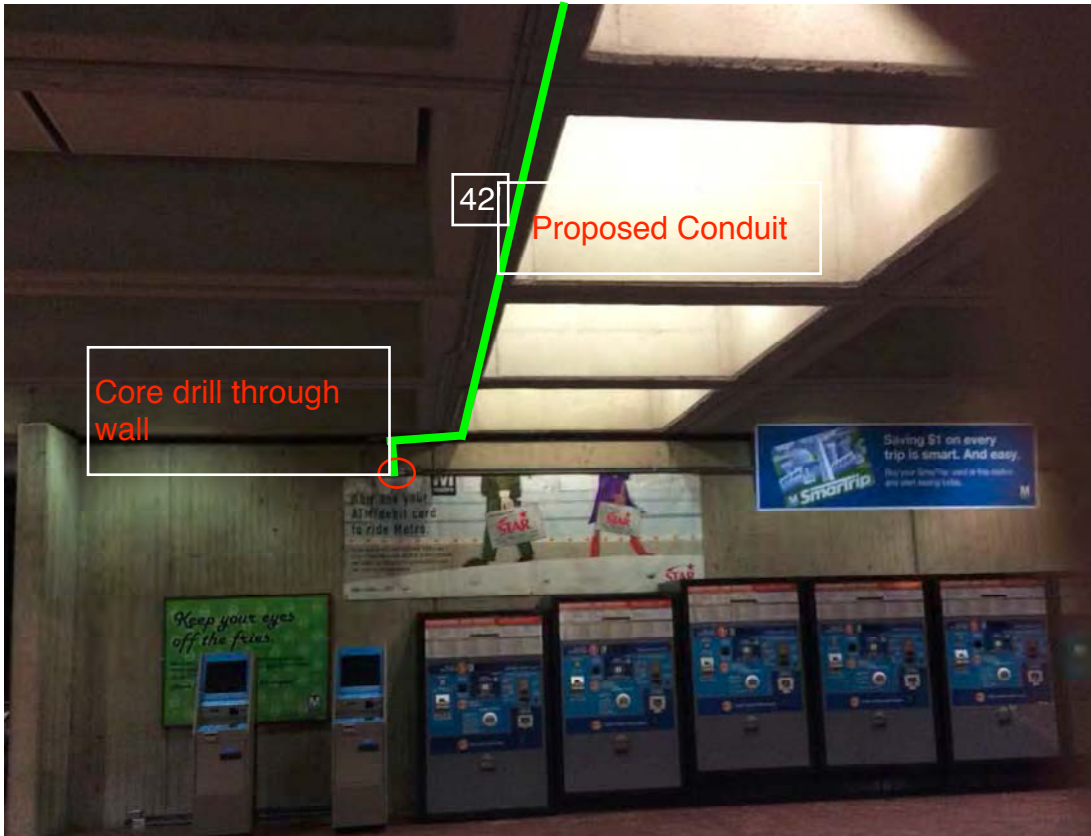


Photo 5 – Proposed conduit in Room 210 ceiling plenum

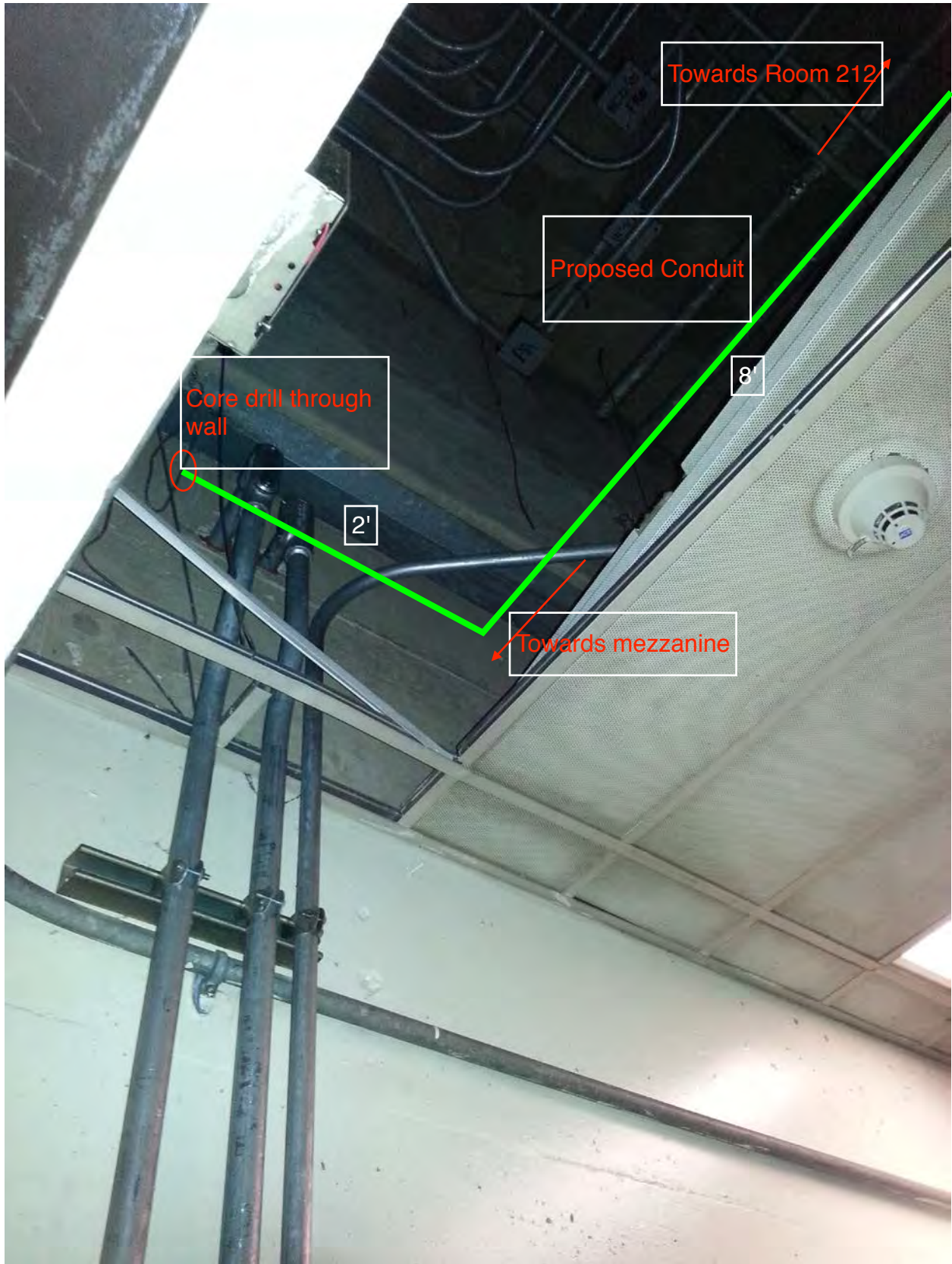


Photo 6 – Proposed conduit in Room 212.

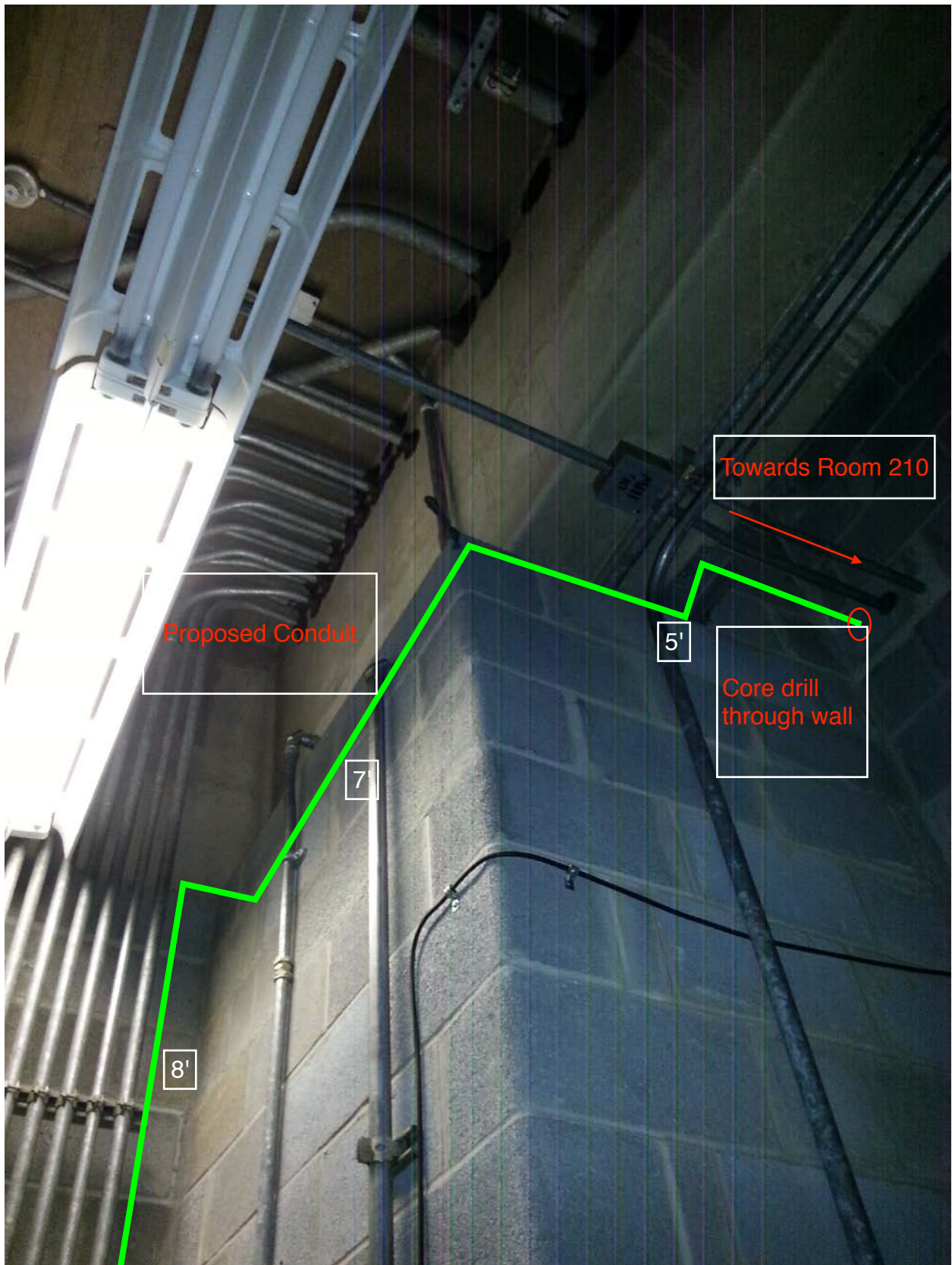
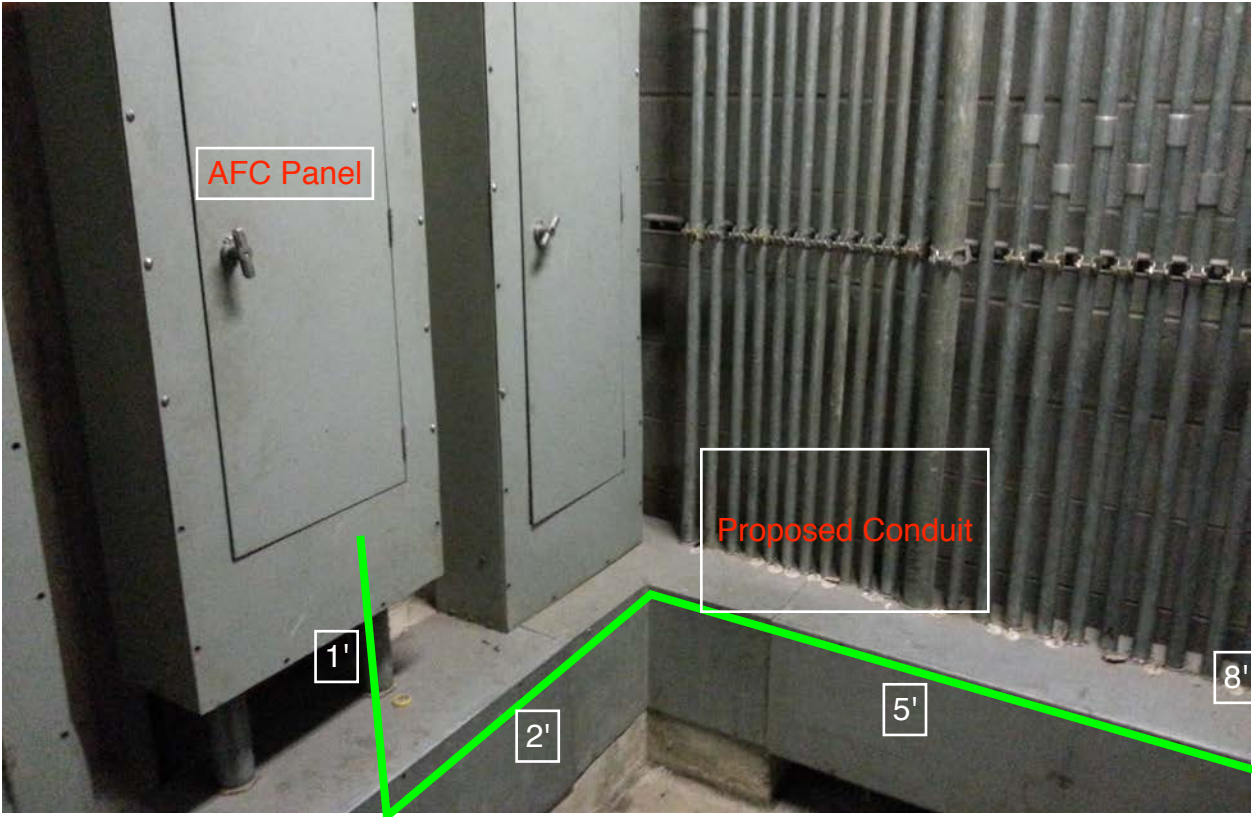
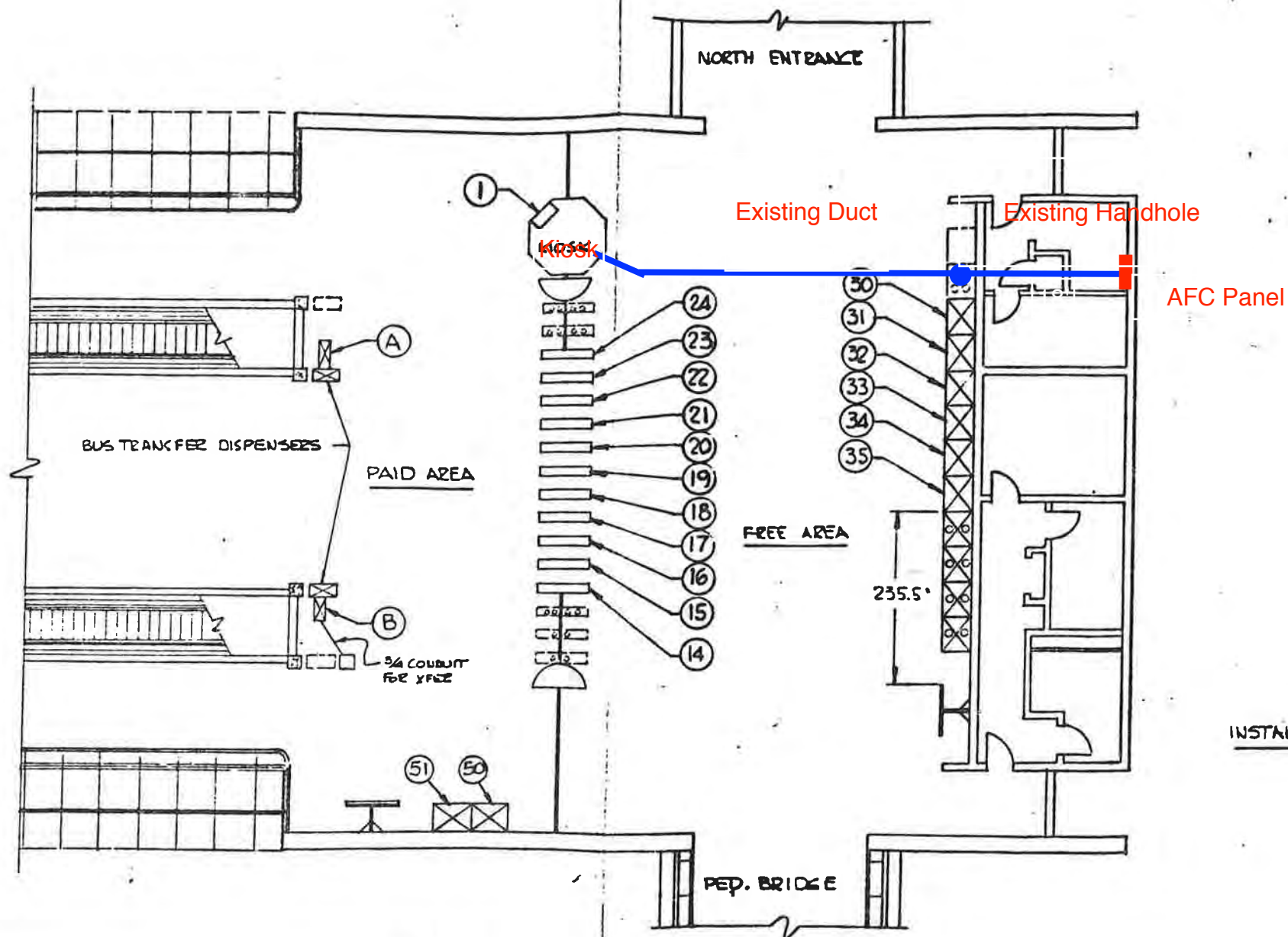


Photo 7 – Proposed conduit in Room 212.



EXISTING DUCT ROUTE



NON MBE	MACHINE TYPE	SERIAL NUMBER	CIRCUIT BREAKER NUMBER	WIRE SIZE AWG
A	TRANSFER DISPENSER	SN 8640	1 KIOSK 22	
B	TRANSFER DISPENSER	SN 8633	2 AM 50 23	FG 22
	EDALS	DS 8060	3 KIOSK 24	
4	EXIT GATE	GX 45 34	4 KIOSK 25	FG 23
5	REV. GATE	GR 7500	5 KIOSK 26	
6	REV. GATE	GR 7249	6 FV 30 27	FG 24 VNS 102A
7	REV. GATE	GR 7559	7 FV 30 28	GATE 86A
8	REV. GATE	GR 7521	8 FV 31 29	FUTURE APM 86A
9	REV. GATE	GR 7527	9 GATE 15 30	XPER 11
10	REV. GATE	GR 7568	10 FV 32 31	FUTURE
11	REV. GATE	GR 7564	11 FG 16 32	"
12	REV. GATE	GR 7532	12 FV 33 33	"
13	REV. GATE	GR 7562	13 FV 17 34	"
14	ENTRY GATE	SN 3557	14 FV 34 35	FUTURE
15	FARECARD VAND	FV 1729	15 FG 18 36	
16		FV 1272	16 FV 35 37	
17		FV 1292	17 FG 19 38	
18		FV 1285	18	39
19		FV 1282	19 FG 20 40	
20		FV 1719	20	41
21	ADD FARE	AM 2710	21 FG 21 42	
	ADD FARE	AM 2708		

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 APPROVED AS CORRECTED
 (RESUBMITTAL NOT REQUIRED)
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BY: _____
 For Contracting Officer

DATE: _____

MEZZANNE PLAN



CP23007E-103-1-1

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 .125 THRU .250: +.005 - .001
 .251 THRU .500: +.008 - .001
 .501 THRU .750: +.010 - .001
 .751 THRU 1.000: +.010 - .001

CONTRACT NUMBER
 DRAWING NUMBER
 926-0455

SHEET 1 OF 1

TITLE
 WEST FALLS CHURCH STATION
 INSTALLATION PLAN

INSTALLATION AS BUILT

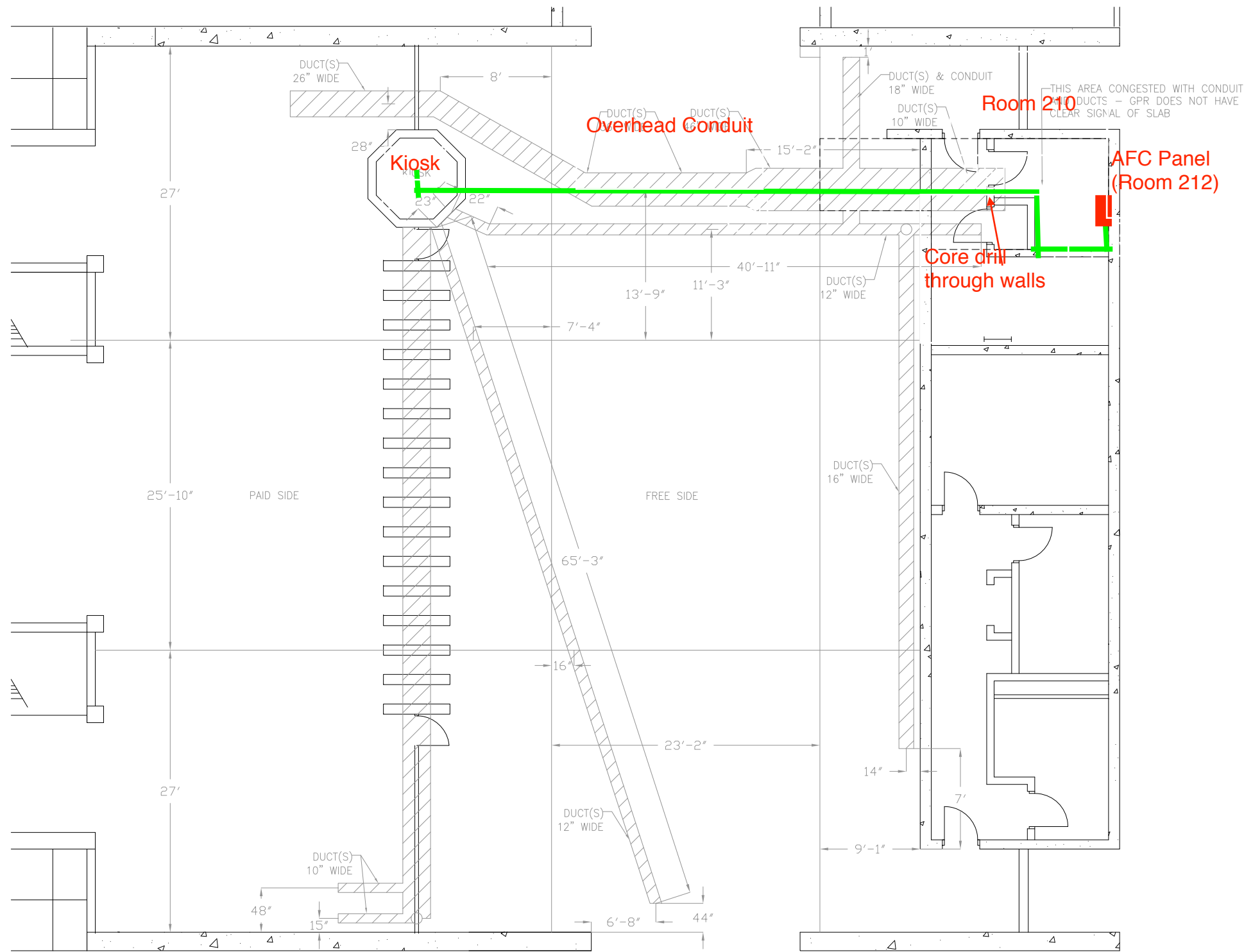
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CODE IDENT NO.
 57560

DRAWN: F. STEED
 CHECKED: J. STEED
 DESIGNED: J. STEED
 ENGINEER: J. STEED
 APPROVAL: J. STEED

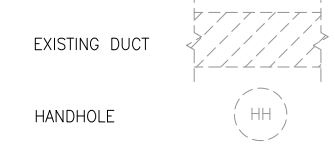
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LEGEND:



WEST FALLS CHURCH STATION
 SCALE: NOT TO SCALE

CONTRACT NO.
 XXXXXX

DESIGNED C. LOOSE 11-14
 DATE 11-14
 DRAWN C. LOOSE 11-14
 DATE 11-14
 CHECKED M. BUTLER 11-14
 DATE 11-14
 APPROVED _____
 DATE _____

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION

REVISIONS		
DATE	BY	DESCRIPTION

APPROVED _____

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 DEPARTMENT OF TRANSIT INFRASTRUCTURE
 AND ENGINEERING SERVICES
 OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

GFP A Gannett Fleming/Parsons
 JOINT VENTURE
 SUBMITTED _____
 PROJECT MANAGER

15-NEPP-01
 IN - FLOOR DUCT INSPECTIONS
 K06 West Falls Church
 PROPOSED OVERHEAD CONDUIT ROUTE
 SCALE NOT TO SCALE
 DRAWING NO. K06-E-100
 XXX

Mezzanine Inspection Report (Scoping)

Date: 02/25/2015	Station Name: K07 Dunn Loring	Mezzanine #: 102	Completed By: Zach Fitzwater
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Summary

Video scoping and pull string installation was completed for the communication ducts in the upper and lower faregate arrays. Video scoping was completed for the power ducts in the upper and lower faregate arrays. Ducts for the lower faregate arrays pass through one handhole at a 90 degree bend. Ducts for the upper faregate arrays pass through two handholes with two 90 degree bends. Video scoping and pull string installation was only partially completed for the power run from the kiosk to the AFC panel. Power duct from kiosk to handhole 4, which is the first handhole in this run, was at capacity and could not be scoped and pull string was not installed. Pull string was installed between handhole 4 and the AFC panel.

Scanning was completed at this station. A proposed duct run will run parallel to the existing ducts on the outside edge near the far wall towards the back rooms. The duct will run from the kiosk to just inside the door to Room #301 to a proposed handhole. The proposed power run will transition to conduit at the proposed handhole and enter the AFC panel near the bottom on the side of the panel.

Photos and drawings are for reference purposes only; see new schematic drawing/proposed pathway on last page.

Scoping of Faregate Array(s)

Task	Yes/No	Notes
Communications Duct – Upper Faregate Array (5 Gates)		
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Dunn Loring Station 3inch Upper Comm Duct kiosk to HH1 to HH2 to Last Faregate.avi file.
Were pull strings installed at all faregates in the array?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	3" duct less than 15 wires
Communications Duct - Lower Faregate Array (4 Gates)		
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Dunn Loring Station 3inch Lower Comm Duct Kiosk to HH to Last faregate.avi file.
Were pull strings installed at all faregates in the array?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	3" duct less than 15 wires
Power Duct - Upper Faregate Array (5 Gates)		
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Dunn Loring Station 6inch Upper Power duct Kiosk to HH1.avi, WMATA Dunn Loring 6inch Upper Power HH1 to HH2.avi, and WMATA Dunn Loring 6inch Upper Power HH2 to Faregate.avi files.
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	6" duct less than 15 wires
Power Duct - Lower Faregate Array (4 Gates)		
Was video scoping completed for the entire duct run?	Yes	Refer to WMATA Dunn Loring Station 6inch Lower Power Duct Kiosk to HH1.avi and WMATA Dunn Loring 6inch Lower Power HH1 to Faregate.avi files.
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct at capacity? Provide additional details about the dimensions of ducts and number of wires.	No	6" duct less than 15 wires


Scoping of Power Duct - Kiosk to AFC Panel		
Task	Yes/No	Notes
Kiosk to Handhole 4 (23')		
Was video scoping completed for the entire duct / conduit run?	No	Refer to WMATA Dunn Loring Station 6inch Power Feed Kiosk to AFC.avi file.
Was pull string installed?	No	
Were there any obstructions or blockages? Provide details of type and specific location.	Yes	Duct at capacity and camera could not be pushed through duct
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	Yes	6" duct at 80% capacity
Handhole 4 to AFC Panel (5')		
Was video scoping completed for the entire duct / conduit run?	No	Camera could not get past vertical 90 degree bend to AFC panel.
Was pull string installed?	Yes	
Were there any obstructions or blockages? Provide details of type and specific location.	No	
Is the duct / conduit at capacity? Provide additional details about the dimensions of duct / conduit and number of wires.	No	Two 6" ducts less than 15 wires each
Observations / Issues / Next Steps		
Existing power run approximately 28' of duct. Proposed run approximately 25' of duct and 5' of conduit for a total of 30'.		
Sign Off		
	GFP Representative	WMATA PRGM
Name:	Zach Fitzwater	
Signature:		
Date:	02/25/2015	

Photo #1 – K07 Dunn Loring: Ducts on Mezzanine floor

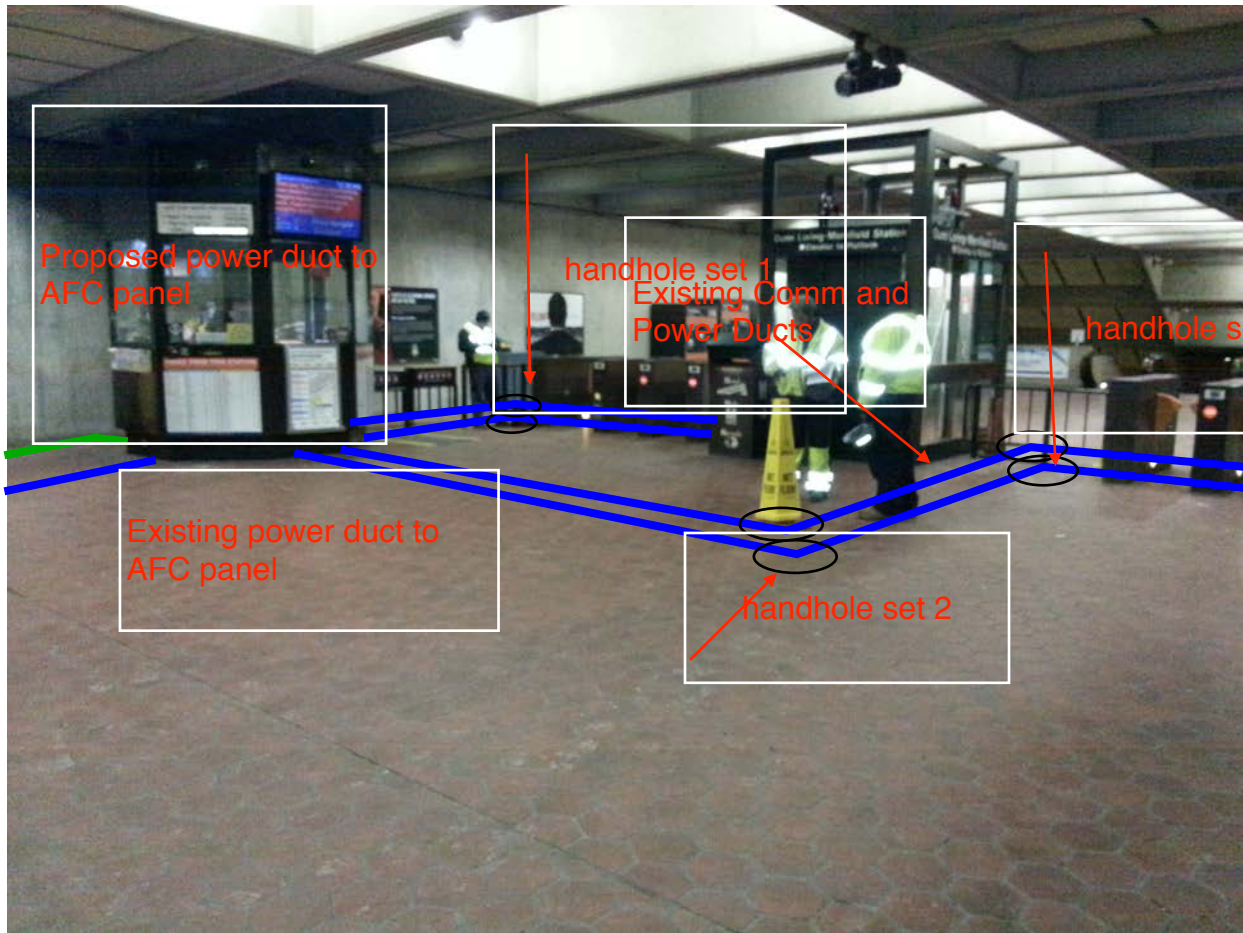
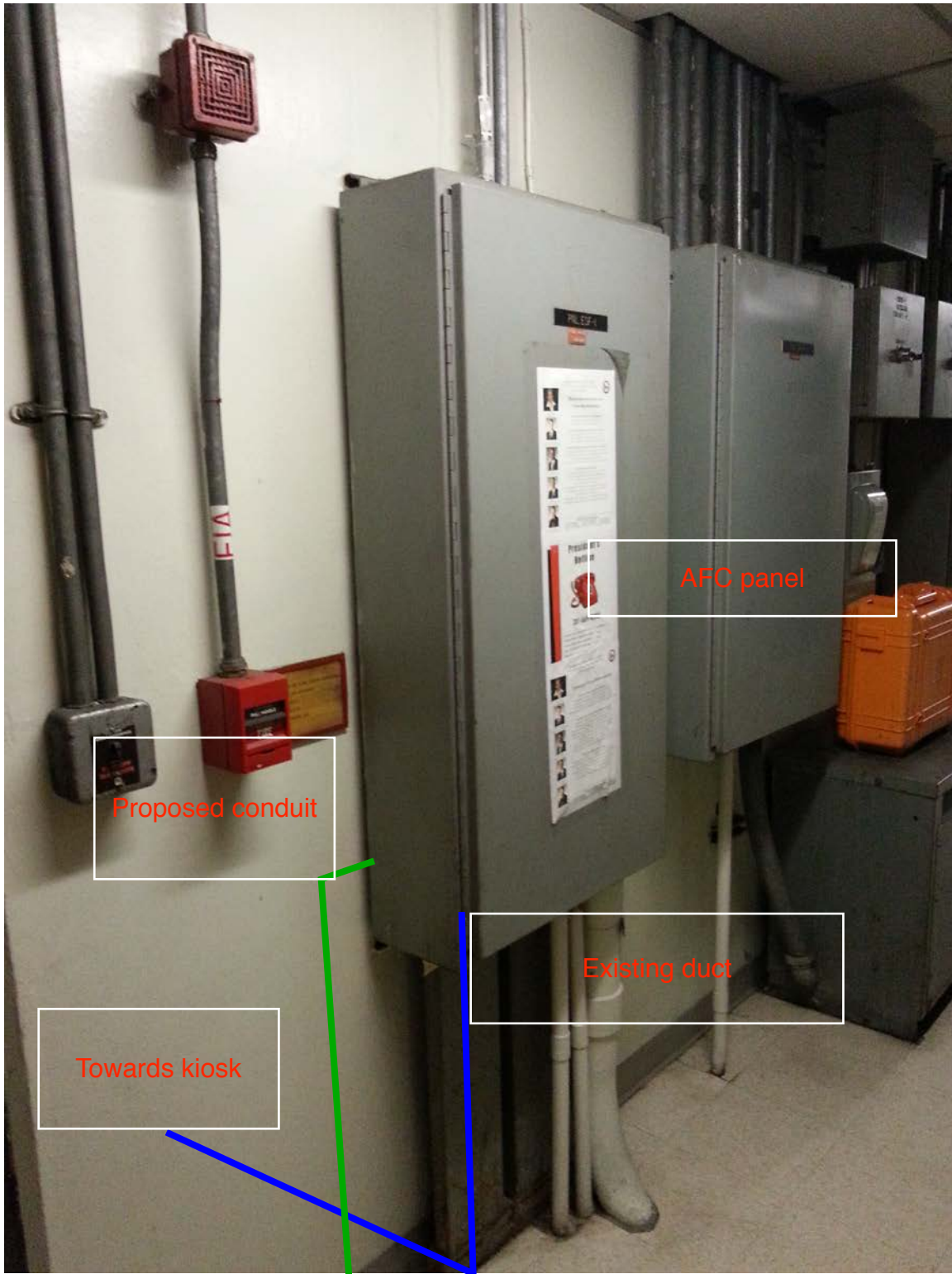


Photo #2 – K07 Dunn Loring: Proposed and Existing runs towards AFC panel



Photo #3 – K07 Dunn Loring: Proposed and Existing runs at AFC panel



AFC panel

Proposed conduit

Existing duct

Towards kiosk

Towards proposed handhole

See new schematic drawing/proposed pathway on last page

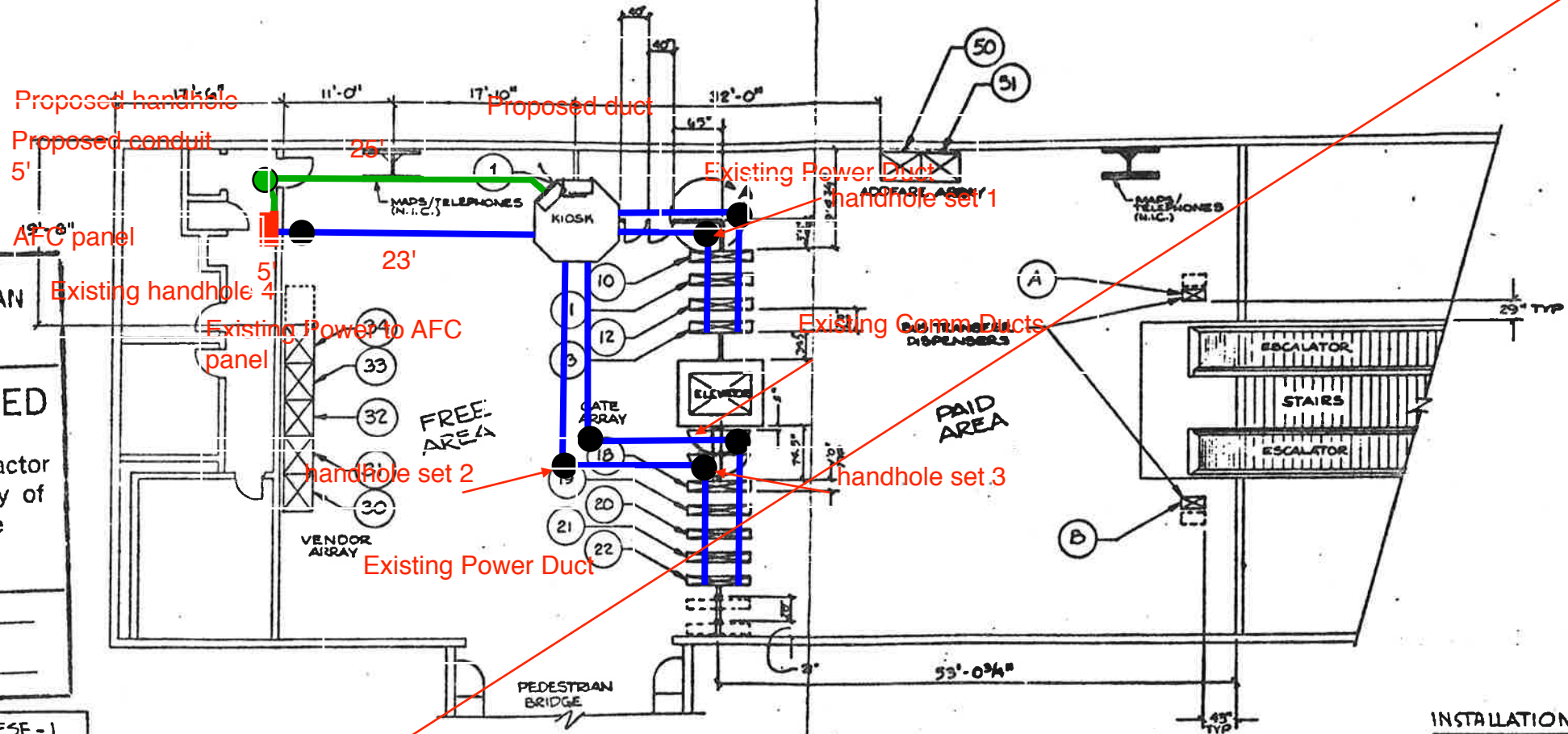
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For Contracting Officer

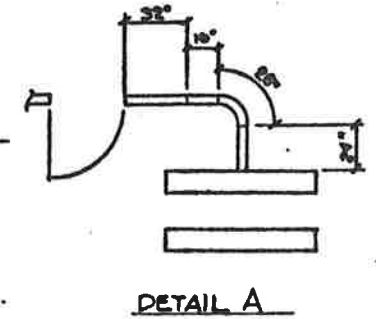
DATE: 1-11-84



PANEL * ESF - 1				
POSITION NUMBER	MACHINE TYPE	SERIAL NUMBER	CIRCUIT BREAKER NUMBER	WIRE SIZE (AWG)
A	XFER DISPENSER	8634	1 FG 22	22
B	XFER DISPENSER	8631	4 FG 22	23
1	EDADS	050303	9	24
10	EXIT GATE	GY 4505	4 FG 21	15 XFER # 1
11	REV GATE	6R 7518	5	26
12	REV GATE	6R 7319	6 FG 20	27 XFER # 2
13	ENTRY GATE	GN 3502	7	28
18	EXIT GATE	GX 4508	8 FG 19	29
19	REV GATE	6R 7511	9 FV 30	30
20	REV GATE	6R 7507	10 FG 18	31
21	REV GATE	6R 7516	11 FV 31	32
22	ENTRY GATE	GN 3534	12	33
30	FARECARD VEND.	FV 1731	13 FV 33	34
31	"	FV 1145	14	35
32	"	FV 1179	15 FV 32	36
33	"	FV 1173	16 FG 11	37
34	"	FV 1345	17 FV 34	38
30	ADDPAKE	AM 2706	18 FG 10	39
51	"	AM 2707	19 AM 50	40
			20 FG 12	41
			21 AM 51	42

MEZZANINE PLAN

1. DELETE SERVICE GATES BY ELEVATOR
2. RE-LOCATE EDAD'S IN KIOSK
3. FARE GATE NO. 22 ON CIRCUIT BREAKER NO. 2



CP 27007E-104-1-1

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TOLERANCES ON DIMENSIONS ON

HOLE'S

AMOUNTS: 3 O.S. DEG.

251 THRU .500 +.008 - .001

.501 THRU .750 +.010 - .001

.751 THRU 1.000 +.010 - .001

CONTRACT NUMBER

DRAWING NUMBER 926-0458

SHEET 1 OF 1

TITLE DUNN LORING STATION INSTALLATION PLAN

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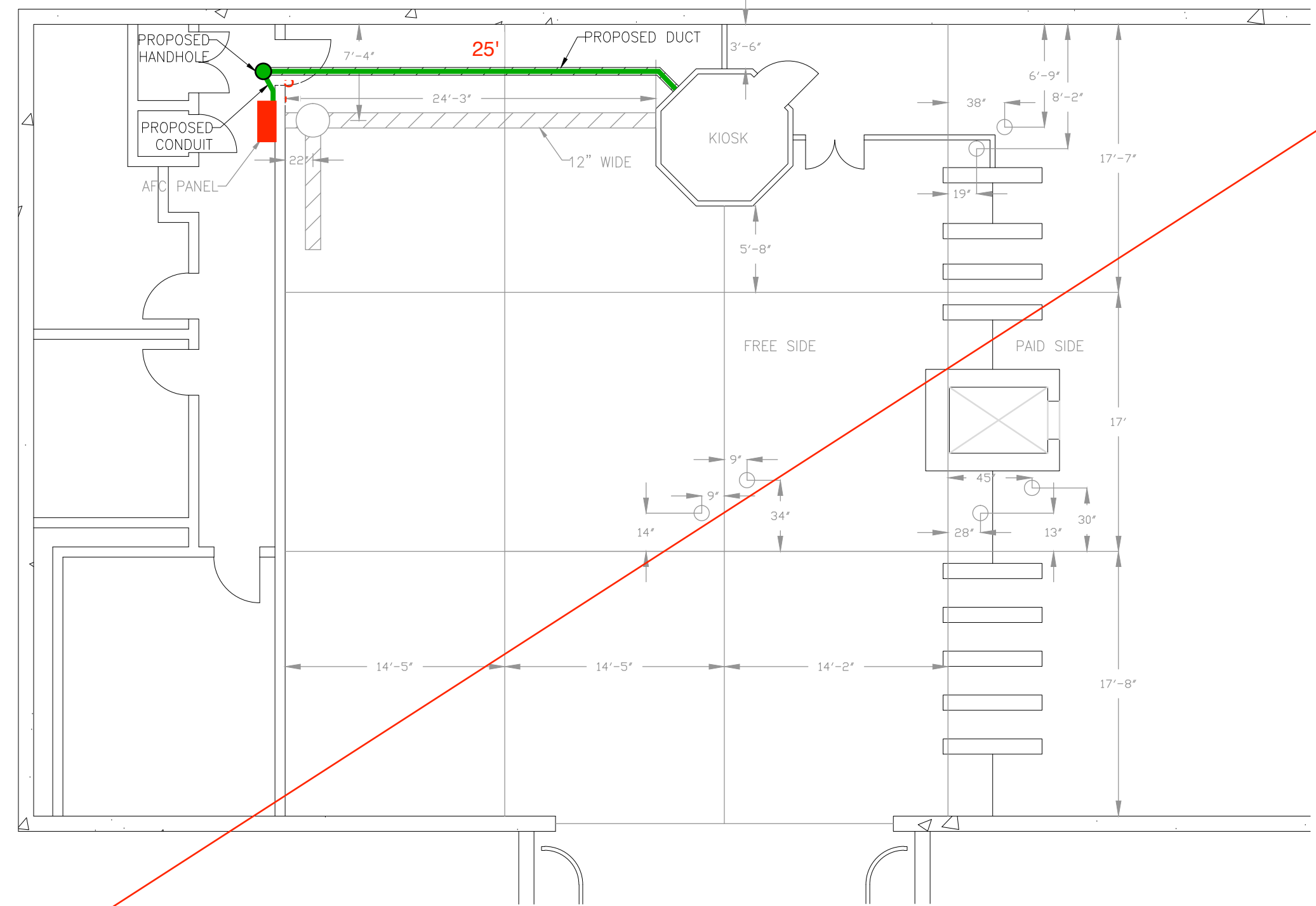
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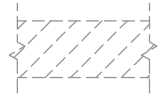


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See new schematic drawing/proposed pathway on last page



LEGEND:

- EXISTING DUCT 
- MANHOLE 
- HANDHOLE 

DUNN LORING STATION
SCALE: NOT TO SCALE

CONTRACT NO.
XXXXXX

DESIGNED		DATE		REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY	NUMBER	DESCRIPTION	DATE	BY
C. LOOSE	03-15						
C. LOOSE	03-15						
M. BUTLER	03-15						

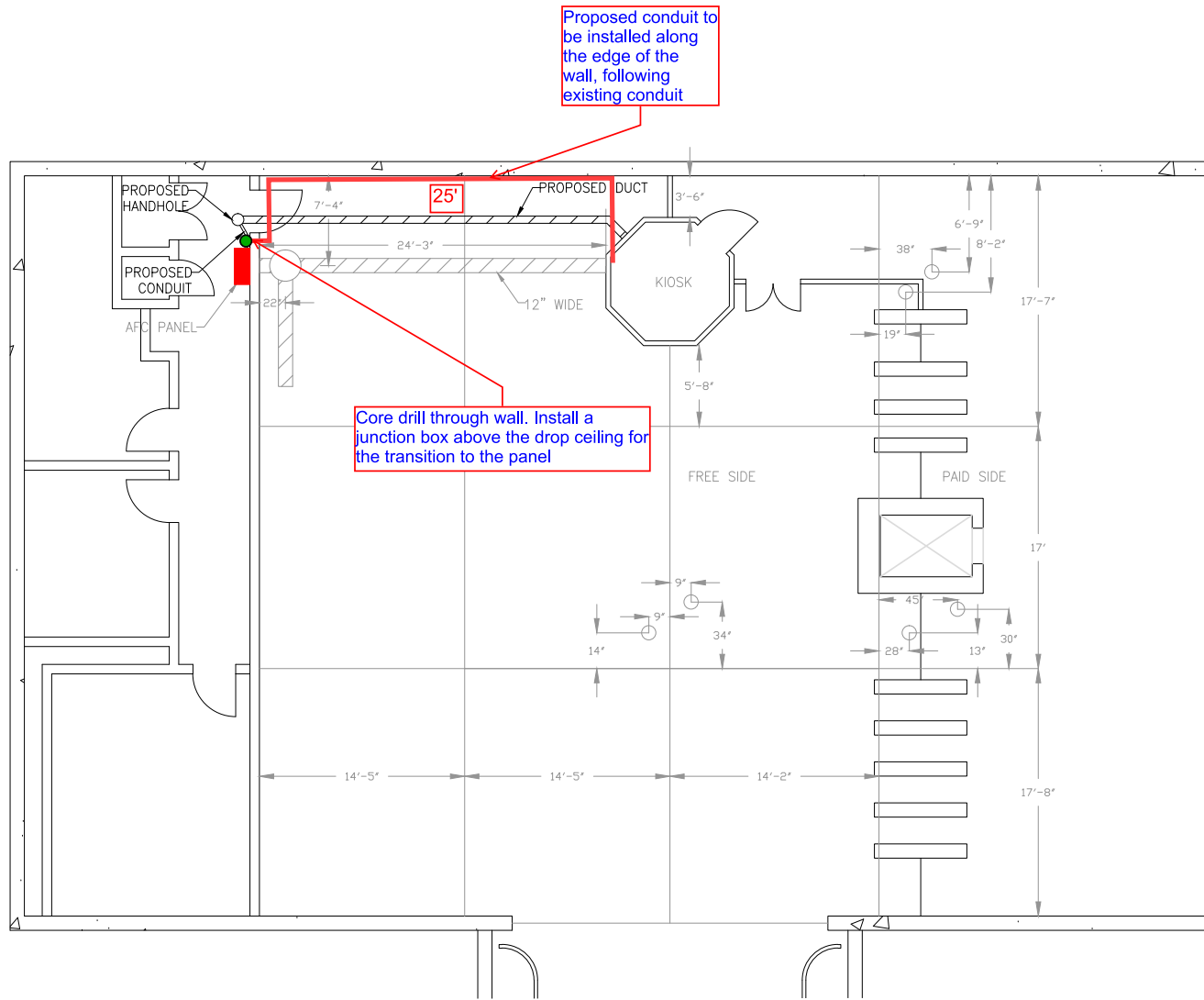
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GFP A Gannett Fleming/Parsons JOINT VENTURE

APPROVED _____ SUBMITTED _____ PROJECT MANAGER

15-NEPP-01
IN - FLOOR DUCT INSPECTIONS
K07 Dunn Loring
PROPOSED POWER CONDUIT/DUCT RUN

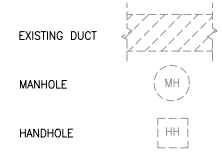
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LEGEND:



DUNN LORING STATION
SCALE: NOT TO SCALE

CONTRACT NO.
XXXXXX

DESIGNED	C. LOOSE	03-15
DRAWN	C. LOOSE	03-15
CHECKED	M. BUTLER	03-15
APPROVED		

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION

DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

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SUBMITTED _____
PROJECT MANAGER

15-NEPP-01
IN - FLOOR DUCT INSPECTIONS
K07 Dunn Loring
PROPOSED POWER CONDUIT/DUCT RUN

SCALE: NOT TO SCALE

DRAWING NO.
K07-E-100

XXX